

this moment, we expose and irritate the sciatic nerve, we produce contraction in the limb supplied by that nerve.

3. If we expose and sever the sciatic nerve very high up, in a frog, protecting it by paper wrapped around its peripheral extremity, and then administer a large dose of strychnia, and after the periods of tetanization and relaxation, we irritate the exposed peripheral end of the sciatic, we always produce muscular contractions in the limb it supplies.

M. Dupuy concluded from these experiments that chlorate of strychnia did not act like curare in paralyzing the terminal ends of the motor nerves, but rather that the cord, on account of the violent contractions of which it is the point of departure, loses its excitability and becomes unable to propagate to the muscles the force to make them contract,

In the discussion of this communication, M. Claude Bernard stated that the only character which permitted us to make an absolute distinction, was as follows: If we ligature the posterior part of the body, so as to isolate it completely from the rest, except by the nerves, and then administer curare, we never obtain convulsions in this posterior part, and the sensibility is preserved; and if, in the same conditions, we administer strychnia, the convulsions take place, and when they are over there is no trace of sensibility. The action of curare is, therefore, the reverse of that of strychnia. Strychnia acts first on the sensory nerves, then on the motor; curare, on the other hand, first acts on the motor and then afterwards on the sensory nerves.

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INFLUENCE OF ELECTRIZATION ON THE TROPHIC DISORDERS FOLLOWING SECTION OF THE SCIATIC NERVE.—M. Dejerine read before the Soc. de Biologie, March 13 (reported in *Gaz. Med. de Paris*), a note relative to some experiments lately performed by him in the laboratory of Prof. Vulpian, in regard to the influence of the faradic current on the trophic troubles following section of the sciatic nerve in Guinea pigs. He divided the two nerves in two separate animals, and then submitted one posterior limb of each to electrization for five minutes each day. The results are summed up as follows:

"*En résumé* the faradic currents appeared to us, in this experiment, to act in moderating very clearly the trophic disorders observed in the members of an animal after section of the sciatics. In fact, in one of our Guinea pigs they were not developed at all, and in the other they were much less marked and later in their appearance.

"As to the influence of the faradic currents on the muscular fibre in this experiment, it seemed to be in retarding the muscular atrophy, and the diminution of electro-contractility."

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ARSENIC.—Eustace Smith, M. D., *Brit. Med. Journal*, May 1, recommends the use in chorea of Fowler's solution, in doses of ten minims, three times a day, immediately after meals. He says, "the influence of this treatment upon the disorder is seen almost immediately, and it is rare for any of the physiological effects of the drug to be observed. By this means, cases of the disease which had resisted smaller doses of arsenic, may be cured in a few days, and even severe cases seldom last longer than a fortnight or three weeks."

THEBAIN.—J. Ott (*Boston Med. and Surg. Jour.*, April 8) offers the following summary of the results of his investigations on the physiological action of thebain:

1. Thebain is a tetanoid agent, and pigeons have no special immunity against it.
2. The tetanus is not cerebral, but spinal in origin.
3. The motor and sensory nerves, and the striated muscles are not affected by it.
4. It increases the pulse and blood-pressure, by an action on the vaso-motor centre and the heart itself.
5. The reflex action of the depressor nerve is in no way interfered with.

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ELECTRICITY IN HEMICRANIA.—Domenico Severi.—The author, in the month of September, 1874, inserted in the journal *Galvani*, a note in which he considered hemicrania as a temporary paralysis of the cervical sympathetic. He admitted, however, that hemicranias of a different nature existed. We have now another observation by the same author. A man of forty years was subject to frequent attacks of hemicrania on the left side. It was preceded by heat and swelling of the veins of the side; recurred every month or oftener, when it was induced by any intellectual labor.

Severi proposed the application of electricity to the cervical sympathetic, and applied the induction machine of Pizzorno, taking care to apply one electrode along the whole course of the sympathetic in the neck. The application was kept up ten minutes. All the existing symptoms, heat, venous turgescence, etc., disappeared.

At the end of the month a new attack came on. Electricity was not applied, but it was observed that the intensity and duration of the seizure was less than before. When it again appeared, electrization was again resorted to, with success in averting the attack. The author hence concludes that electricity is always indicated in hemicrania, and that it is frequently a good palliative and curative agent.

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TRANSFUSION OF BLOOD IN INSANITY.—We copy the following abstract by Leidesdorff, of four articles on this subject which appeared in the *Archivio Italiano*, January and March, 1875, from the *Psych. Centralbl.*, No. 3, of the present year:

The four simultaneously appearing articles in the *Italian Archiv for Nervous and Mental Disease*, show sufficiently to what an extent the Italian physicians have taken up the subject of transfusion.

Michetti gives a series of comparative experiments performed by him, on transfusion of human and animal blood. They consist of six operations, in three of which, arterial lamb's blood, and in the three others, defibrinated human blood was employed. From 20–25 grammes (= from about  $\frac{3}{8}$  to  $\frac{1}{2}$  oz.) were injected. The special form of the disease was melancholia of a severe type. Two ended fatally in about three days; one from profound inanition and exhaustion, and the other from exhaustion and diarrhœa. In the other four cases, a more or less enduring improvement followed the operation.